

ABSTRACT OF THE DISCLOSURE

APPARATUS FOR ISOLATION OF PAYLOADS
WITH LOW TRANSMISSIBILITY

5 A payload isolation system for isolating a payload from
a base structure upon which the payload is supported. The
payload isolation system includes: a motion constraint for
maintaining a parallel relationship between the payload and the
base structure; and a support for providing vertical and/or
lateral support of the payload relative to the base structure
such that the transmission of vertical and/or lateral vibration
between the payload and the base structure are suppressed. The
support means preferably exhibits nonlinear elastic
10 characteristics in response to an effective weight of the
payload. The non-linear elastic characteristics preferably
include a substantially rigid characteristic at low and high
levels of deformation and a compliant characteristic at
intermediate levels of deformation. In yet another preferred
15 implementation, the motion constraint means are mechanical
linkages.